<u>Amendments to the Claims:</u>

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>Listing of Claims:</u>

1.   (currently amended) An image processor generating image output for a printer from image data received from an image source, comprising:

(a) a first processor system, characterized by having a first bus for communication with the image source, said first processor system communicating control data with the image source via said first bus, said first processor system further characterized by providing high-level control of the image processing performed within said image processor; and

(b) a second processor system in circuit communication with said first processor system and characterized by having a second bus for communication with the same image source that is separate and distinct from the first bus, said second processor system receiving image data from the image source via said second bus, and said second processor system further characterized by performing a majority of the image processing performed within said image processor responsive to control by said first processor system<u>, wherein said second processor system comprises a raster image processor (RIP) processor in circuit communication with a plurality of color plane processors, each of said color plane processors corresponding to one of a plurality of color planes of the image data, said RIP processor characterized by performing separation of the image data into color plane data for each of the plurality of color planes and transmitting color plane data for each of said color planes to said corresponding color plane processor, each of said plurality of color plane processors processing respective color plane data received from said RIP processor to generate image output for the printer</u>.

2.   (original) An image processor according to claim 1 wherein said first processor system receives control data from the image source via said first bus.

3.　　(original)　An image processor according to claim 1 wherein said first processor system transmits control data to the image source via said first bus.

4.　　(cancel)

5.　　(currently amended)　An image processor according to ~~claim 4~~ Claim 1 wherein said RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, and magenta plane data, and further wherein said plurality of color plane processors comprises a cyan plane processor in circuit communication with said RIP processor, a yellow plane processor in circuit communication with said RIP processor, and a magenta plane processor in circuit communication with said RIP processor, each of said color plane processors receiving its respective color plane data from said RIP processor; said cyan plane processor characterized by processing cyan plane data received from said RIP processor to generate image output for the printer; said yellow plane processor characterized by processing yellow plane data received from said RIP processor to generate image output for the printer; and said magenta plane processor characterized by processing magenta plane data received from said RIP processor to generate image output for the printer.

6.　　(original)　An image processor according to claim 5 wherein said RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, magenta plane data, and black plane data, and further wherein said plurality of color plane processors further comprises a black plane processor in circuit communication with said RIP processor, said black plane processor receiving black plane data from said RIP processor, and said black plane processor characterized by processing black plane data received from said RIP processor to generate image output for the printer.

7.　　(original)　An image processor according to claim 6 wherein said RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, magenta plane data, black plane data, light cyan plane data, and light magenta plane data, and further wherein said plurality of color plane processors further comprises a light cyan plane processor in circuit

communication with said RIP processor and a light magenta plane processor in circuit communication with said RIP processor, each of said color plane processors receiving its respective color plane data from said RIP processor;

(a) said light cyan plane processor characterized by processing light cyan plane data received from said RIP processor to generate image output for the printer; and

(b) said light magenta plane processor characterized by processing light magenta plane data received from said RIP processor to generate image output for the printer.

8. (currently amendedl) An image processor according to ~~claim 4~~ claim 1 wherein each of said plurality of color plane processors is further characterized by performing at least one of the following functions on its respective color plane data as part of generating image output for the printer: print masking, registration correction, and failed nozzle correction.

9. (original) An image processor according to claim 7 wherein each of said plurality of color plane processors is further characterized by performing the following functions on its respective color plane data as part of generating image output for the printer: print masking, registration correction, and failed nozzle correction.

10. (original) An image processor according to claim 8 wherein said RIP processor performs at least one of the following functions on the image data prior to transmitting color plane data for each of said color planes to said corresponding color plane processor: print masking, image resizing, ink depletion, printer calibration, printer color conversion, and dithering.

11. (original) An image processor according to claim 9 wherein said RIP processor performs the following functions on the image data prior to transmitting color plane data for each of said color planes to said corresponding color plane processor: print masking, image resizing, ink depletion, printer calibration, printer color conversion, and dithering.

12.   (original) An image processor according to claim 11 wherein said RIP processor is in circuit communication with said plurality of color plane processors via a common bus implemented with a backplane.

13.   (original) An image processor according to claim 1 wherein the printer comprises at least one ink jet head and said second processor system is characterized by generating image output in the form of ink jet head control signals for the at least one ink jet head.

14.   (currently amended) ~~An image processor according to claim 24~~ An image processor generating image output for a printer from image data received from an image source, comprising:

        (a) a first processor system, characterized by having a print control bus providing a printer control and status path for communication with the image source according to a first bus protocol, said first processor system communicating control data with the image source via said print control bus, said first processor system further characterized by providing high-level control of the image processing performed within said image processor; and

        (b) a second processor system in circuit communication with said first processor system and characterized by having an image data bus providing a printer image data path separate from said printer control and status path for communication with the same image source according to a second bus protocol that is different than the first bus protocol, said second processor system receiving image data from the image source via said image data bus, and said second processor system further characterized by performing a majority of the image processing performed within said image processor responsive to control by said first processor system, wherein said second processor system comprises a raster image processor (RIP) processor in circuit communication with a plurality of color plane processors, each of said color plane processors corresponding to one of a plurality of color planes of the image data, said RIP processor characterized by performing separation of the image data into color plane data for each of the plurality of color planes and transmitting color plane data for each of said color planes to said corresponding color plane processor, each of said plurality of color

plane processors processing respective color plane data received from said RIP processor to generate image output for the printer.

15. (original) An image processor according to claim 14 wherein said RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, and magenta plane data, and further wherein said plurality of color plane processors comprises a cyan plane processor in circuit communication with said RIP processor, a yellow plane processor in circuit communication with said RIP processor, and a magenta plane processor in circuit communication with said RIP processor, each of said color plane processors receiving its respective color plane data from said RIP processor;

(a) said cyan plane processor characterized by processing cyan plane data received from said RIP processor to generate image output for the printer;

(b) said yellow plane processor characterized by processing yellow plane data received from said RIP processor to generate image output for the printer; and

(c) said magenta plane processor characterized by processing magenta plane data received from said RIP processor to generate image output for the printer.

16. (original) An image processor according to claim 15 wherein said RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, magenta plane data, and black plane data, and further wherein said plurality of color plane processors further comprises a black plane processor in circuit communication with said RIP processor, said black plane processor receiving black plane data from said RIP processor, and said black plane processor characterized by processing black plane data received from said RIP processor to generate image output for the printer.

17. (original) An image processor according to claim 16 wherein said RIP processor performs separation of the image data into at least cyan plane data, yellow plane data, magenta plane data, black plane data, light cyan plane data, and light magenta plane data, and further wherein said plurality of color plane

processors further comprises a light cyan plane processor in circuit communication with said RIP processor and a light magenta plane processor in circuit communication with said RIP processor, each of said color plane processors receiving its respective color plane data from said RIP processor;

(a) said light cyan plane processor characterized by processing light cyan plane data received from said RIP processor to generate image output for the printer; and

(b) said light magenta plane processor characterized by processing light magenta plane data received from said RIP processor to generate image output for the printer.

18.   (original) An image processor according to claim 14 wherein each of said plurality of color plane processors is further characterized by performing at least one of the following functions on its respective color plane data as part of generating image output for the printer: print masking, registration correction, and failed nozzle correction.

19.   (original) An image processor according to claim 17 wherein each of said plurality of color plane processors is further characterized by performing the following functions on its respective color plane data as part of generating image output for the printer: print masking, registration correction, and failed nozzle correction.

20.   (original) An image processor according to claim 18 wherein said RIP processor performs at least one of the following functions on the image data prior to transmitting color plane data for each of said color planes to said corresponding color plane processor: print masking, image resizing, ink depletion, printer calibration, printer color conversion, and dithering.

21.   (original) An image processor according to claim 19 wherein said RIP processor performs the following functions on the image data prior to transmitting color plane data for each of said color planes to said corresponding color plane processor: print masking, image resizing, ink depletion, printer calibration, printer color conversion, and dithering.

22.　(original) An image processor according to claim 21 wherein said RIP processor is in circuit communication with said plurality of color plane processors via a common bus implemented with a backplane.

23.　(cancel)

24.　(cancel)

25.　(currently amended) An image processor according to ~~claim 24~~ claim 14 wherein said second processor system performing a majority of the image processing performed within said image processor responsive to control by said first processor system is characterized by having a control/status bus providing a control/status data path between said first and second processor systems.

26.　(previously presented) An image processor according to claim 25 wherein the control/status data path is separate from both said printer control and status path and said printer image data path.

27.　(currently amended) An image processor according to ~~claim 24~~ claim 14 wherein the image data bus provides a greater speed of transfer than the print control bus.

28. (cancel)